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# The Management of Russian Universities on the Basis of International Education Quality Standards

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#### **ABSTRACT**

The relevance of the study due to the fact that quality is the most important factor of sustainable development of the national economy, its integration into the world economy. The establishment of effective quality systems focused on the introduction of modern technologies and management methods is the key to a sustainable position of the organization on the market of goods and services. In this regard, this article aims to disclose the concept of quality and quality management of education as one of the most urgent at the present stage of development and for the Russian higher school. The purpose of this article is to analyze theoretical and practical approaches to the problem of effective management of the activities of Russian universities on the basis of international systems of assessing the quality of educational institutions management. The leading attitude to the study of this problem is systemic and structural-functional approaches to address the issue of quality management of higher education in the international context of the development of educational systems. The study is due to the high pace of expansion of higher education, as well as the need to increase the cost both from the state and from the business community and the consumers of educational services. The article presents the modern technologies of evaluation by universities quality of their research and educational activities and identified ways of improving the methods of quality management. The positive component of this approach is that its implementation is maintained as the continuity of the Russian tradition of education and expanding the set of positions to best meet the needs of modern society and standards. Article content is useful to the subjects of the modernization of management processes of modern higher education in the conditions of transformation of the Russian education.

Keywords: Managerial Model, Financial Support, Program of Development, Quality of Education, Innovative Infrastructure, Quality of Management

JEL Classifications: I21, I25, I28

### 1. INTRODUCTION

There are both public and private higher education institutions, many of which have branches and representative offices across the country and abroad (mainly in CIS countries). Currently, there are five types of higher education institution: (1) Federal university a leading higher education institution and center of research at federal level. Currently, there are nine federal universities that were established following the merger of a number of regional universities. (2) National Research University: A recent addition to the system. A higher education institution integrating regional

research activities. Currently, there are 29 such universities. (3) University: A higher education institution offering a wide range of programs in many disciplines. (4) Academy: A higher education institution that delivers diverse programmes in a certain area (e.g., agriculture, health, arts etc.). (5) Institute: An education institution which trains specialists for a specific profession. A new type of university emerged recently that is not stipulated in the Law on Higher and Postgraduate Education and came about as a result of the national priority project on education, namely that of an innovative university. This is a higher education institution which offers innovative programmes and courses and pursues a

strong development and innovation agenda. Currently, there are 34 such universities.

The Russian system of governance of higher education has retained certain features of the soviet system that followed a linear and highly centralized model. Most of the higher education institutions are affiliated and fall under the jurisdiction of 24 federal ministries that are the founders of state higher education institutions. These are: The RF Ministry of Education and Science (337 HEI), the Ministry of Agriculture (58 HEI), the Ministry of Health and Social Development (47), the Ministry of Culture and Mass Communications (44). Eight additional ministries are in charge of two higher education institutions each. The Federal Law of 2004 delineated the responsibilities and the financing regulations in the system of education between different parties, such as the federal center, regions and local autonomous governments. According to the amended legislation, the state higher education institutions were transferred to the federal level and are financed from the federal budget. The federal authorities are responsible for setting state education standards and for overall policy in education, including the financial policy and legal regulation of the system of higher professional and vocational education (Tuzikov and Zinurova, 2009). The implementation of the policy is vested in the regional education administrations and education institutions that have significant autonomy. Regional education administrations (departments, ministries or committees) can adopt their own regulations and regional parliaments can adopt education legislation appropriate to regional needs. Within the structure of the Ministry, the Federal inspection service in the sphere of education and science and the Federal service for intellectual property, patents and Trademarks have been established. The Federal inspection controls the implementation of legislation in the sphere of education, performs quality controls in education, in the licensing and accreditation of education establishments and in research organizations. It is responsible for regulating the recognition of degrees and qualifications in education. The influence of the Ministry in the system of higher education is still very high, as it controls almost the entire budget (on average, every state higher education institution gets up to 70-80% of its funding from the state budget). Apart from state education establishments, there are higher education establishments founded and regulated by the RF regions and municipalities. At regional level, higher education departments are established to coordinate all institutions of higher education in the region. Since the mid-90s, the administrative, financial and academic autonomy of higher education institutions has grown considerably. Namely, they currently have the right to: Independently form their structure, identify goals and objectives of academic and research activities, determine admission rules, set the level of tuition fees and raise them; develop courses and identify areas of training. They may also award qualifications at all levels of higher education, recruit teaching staff (on a competitive basis) and conclude contracts of employment with them, implement up-skilling programmes and engage in international cooperation. The enhanced financial autonomy of higher education institutions (namely the right to develop their own medium-term budget plans) has created new job positions within the HEI structure, such as vice-rector for economic policy. About 1/3 of higher education institutions have started planning strategically and quite a few

have formed Committees for University Management (Berman and Gayazova, 2014).

The head of a higher education institution is the rector who is elected for 5 years and who has a number of deputy/vice-rectors responsible for specific activities and in charge of operational issues. Issues related to the development of the higher education institution are vested in the Academic Council that is elected for 5 years. The Academic Council comprises the rector (as chairperson), vice rectors and may also include departmental deans. The structure of higher education institutions is made up of faculties that comprise chairs/units. University and academy faculties may have the status of institutes. Key academic and research entities at higher education institutions are known as chairs.

The sources and mechanisms of financing state and private higher education institutions differ considerably. State higher education institutions regularly (on an annual basis) receive funding from the budget (mostly the federal budget). Moreover, the state provides higher education institutions under its jurisdiction with premises, hostels and other property free of charge. Traditionally, private HEIs did not receive state funding. Their key source of income was tuition fees. The jurisdiction of the founders and the HEI administration allocated funds. However, recently, with the introduction of per capita funding, private universities are entitles to the same funding scheme as state universities. State HEIs must comply with legal constraints relating to obtaining loans and credits and to making profit from the use of state property. Currently, the following new financing mechanisms are being piloted: Per capita funding, funding of development programmes of education institutions, state support through education loans etc. Besides the basic financing, which state-owned higher education institutions and colleges receive based on the number of students, HEIs are entitled to raise funds from a number of sources. One of them is grants from various federal and regional programmes and projects. Both state and private education institutions are entitled to compete for participation in these programmes and projects. The key grant programmes are the federal programme for development of education and the priority regional projects on education (Khairullina et al., 2015). Other sources of funding are: Tuition fees, provision of supplementary services, provision of consultative services, state contracts for training and retraining certain target groups, such as civil servants, teaching staff at regional universities etc; state contracts for research: Provision of services to the public sector; state grants for pure and applied research; income from using rights to intellectual property; income generated by renting out state property managed by HEIs. The nonbudgetary funds are managed by HEIs' Academic Councils within the limits of the estimate of expenses and income that must be approved by the Federal Treasury. Non-budgetary funds comprise, on average, one half of the state higher education institutions budget, sometimes they may represent up to 70%.

### 2. LITERATURE REVIEW

The research of management processes in higher education cannot be complete wwithout recognition macro-processes as the modernization and transformation. Kataev and Shamrovsky (2003) make balance between items "transformation" and "modernization." This researchers defines them as a process of international socialization. Archer (1996), Sztompka (1991), Giddens (1971) represent activity approach, they analyze structure transformation, instability of social institutions, their behavior during the transition period. The atom of changes becomes the individual himself, who plays as an actor or partner. Lavrukhina defines transformation as a determination of present and future by past. In our view, the key point in the concept of "transformation" lays in the process of transition from simple to complex (Lavrukhina, 2014). We can review the process of globalization as an international socialization. The institute of education becomes an effective means of constructive influence on social processes in the conditions of globalization.

Using the term "transformation of education," we mean a system of qualitative changes in the process of reform and transition to a different level of management, organization and implementation of education. The technological side of the changes process make change and adapt new mechanisms of social institutions, brings together actors of society and education, developing new types of foreign interactions. Thus, the preparation of bachelors and masters affects the economic and political institutions of society, making society anyway to think of labor market policies, to identify and define the state order for certain priority regional development areas of training, differentiated this areas of training, depending on the socio-economic development Russian region.

Therefore, changes of current training system become a social change on the one hand, and is characterized by transformation process (some vector) - on the other. This social change can be analyzed from the point of view of functionalism Parsons (1978) and Ogburn (1922), which offered functional appliance factor – differentiation of education and its development in order to adapt. Ogburn (1922) determines material culture as the factor of change (Ogburn, 1922). Today we can say that this pattern cannot explain to us the existence of certain social changes, as there are many factors, both tangible and intangible, having an impact on the change of training in Russia.

To determine the qualitative aspect of the process of change in the dyad of terms "transformation," "social change" is not enough only analysis of the term "modernization," which characterizes the transition from traditional to modern. "Modernization" cannot describe the social changes, the impact of changes to institutionalize new forms of training, socio-economic development of society. This term reveals organizational area of changes. For example, unidirectional theory analyzes modernization as an evolutionary process (that is associated with the radical transformations and comprehensive models of human existence and activity) and evolutional process. The theory of partial modernization (Rueschemeyer, 1976) considered modernization process as the actual process that occurs in all societies.

Some researchers put forward the idea of a multiserver modernization (Gorshkov, 2007). From their opinion there is no one model of modernization - every society has original ways of development, modernization is not single and continuous process. Such multiserver modernization is near to "transformation."

Gavrov (2004) think that in Russian language there is no one term qualified as changing of modernity. Analyzing of educational system from the point of "modernization" is not correct, because modernization suppose underdevelopment of Russian system of education. That is why the term "modernization" is mismatch for our research.

Many encyclopedias and dictionaries analyze the term "transformation" as the transformation of the form change, shape, essential properties. In the theory of societal transformation (Zaslavskaya, 2003) determined that the process of social transformation of the Russian society wider the process of transformation of individual institutions of society (Zaslavskaya, 2003). Transformation includes entities that initiate social transformation, the content of their social activities, as well as the relationship of these targeted actions with mass processes causing changes in the institutional and social structures of society.

Transformation of higher educational system takes place as follows: Legitimating of changes, institutionalizing, and revision of the subjects of action in the educational space, approval of changes in society. Rest upon to conclusions of Yadov (2007) and Ionin (2004) we can make the term "transformation" - it means sociokultural changes of structure, practice, values, creation of new or the maintenance of the old forms of communication and behavior. The transformation of Russian higher education - the process of adoption, implementation and adaptation of innovative forms, methods and training models to real change in the mass of social practices based on the target of the state reform efforts, innovation of educational process, characterized by reactive-adaptive behavior of groups of subjects of education.

The article is based on the case-study methodology. The problems of management and financial support while realization of the program of a new type of universities are studied using the case of Kazan State Technological University that is redesigned into the format of the National Research Technological University.

#### 3. RESULTS

### 3.1. Managerial Model

A management model by the National research university reflects the process of integration of education, science and industry on the basis of the University. Its structure must include scientific and educational centers, research and production enterprises, research institutes and other organizations, which are significant for the chemical industry and legally, organizationally and economically dependent. All or part of the property on these enterprises must belong to the university where innovative process of learning is directly coupled with implementation of scientific, design and technological, economic, financial or industrial operation.

Administration of the University - Rector, rectorate, academic council, board of trustee and others carried out Control functions

by the NRU creation Program. And executive board ("vertical" control) is the executive management of program development of the Research University.

Head of the Program is the rector of the university, who is personally responsible for organizing and ensuring the achievement of the objectives of the Program (according to the established indicators, including implementation of the interim stages), the targeted and efficient use of allocated funds. Rector of the University determines the forms and methods of implementation of the program, Rector presents the annual report about achievements and results on key indicators and indicators of the Program to a founder. Meaningful development of scientific and educational activities is provided in the framework of the five priority spheres of development under the general guidance of the rector.

- Executive management of the development program of the research university includes deputy administrators of the Program in the relevant areas of work, heads of Private Sector Department (PSD) and carries out the project.
- 2. Deputy for Science: Deputy for Science is responsible for the overall management over educational activities and coordinates communication between different parts of the program and other participants in the frame of collaboration for development of education environment. Deputy for Science monitors the educational activities of the university provides integration of projects and activities under the program and the development strategy of the University with the necessary correction of the latter.
- 3. Deputy for innovation: Deputy for innovation is responsible for the overall management of the research and production works on the program and functioning of working areas involved in the program. Deputy for innovation is responsible for central coordination of communications between the various projects and project participants, internal and external in regard to the university. Deputy for innovation provides search of partners for the implementation of innovative projects and technologies, and the development of marketing strategy, organizing the delivery of services at all stages of the innovative cycle.
- 4. Deputy for Finances: Deputy for Finances is responsible for the development and implementation of financial policy and budget of the Program, as well as for monitoring of the financial performance of project implementation; Deputy for Finance ensures the development of corrective actions with regard to the income and expenses. Project managers are at his command in terms of financial support programs and projects.

Leaders of the PSD provide operational planning and management of the implementation of the Program, leaders report to the deputy head of the program about its implementation in different directions and about expenses of program funds every week.

The key functions of the executive management of program development of the research university are: Provision of external relations; coordination of resource flows; working out of regulatory support of the program and its individual projects; working out of guidelines and manuals; process control and procedures of projects and the all program documentation and projects; risk management

of the program and projects, working out of countermeasures and control of their implementation; the formation of a unified information environment of the program; monitoring of all budgets and schedules; centralization of communication between the various projects and participants of the program; formation of professional competences of the university staff in the sphere of program management and its projects; management of other processes and procedures of the program.

Coordination and control structures of the University are Supervisory Council, Scientific Council, Scientific and Technical Council, Board of Trustees, and others. Their function is to provide consulting and organizational support of the Program by the general academic, scientific and industrial community.

In connection with the change of the legal form of the university the supervisory board has become one of the bodies managing the implementation of the program, which would allow public-private partnership in the management of the research universities, optimization of budgeting, attraction of additional sources of financing, the rational use of objects of property rights, including the results of intellectual activities, control of financial flows. During the implementation of the program, the supervisory board will review the draft plan of financial and economic activities of the University and the report about the use of its property, as well as the annual financial statements, performs other functions provided by applicable law. Rector as the individual head of the Program reports quarterly about the implementation of the Program to the Supervisory Board.

Academic Council performs the following functions in the management of the program: Considers the material about the implementation of activities; assesses the effectiveness of the use of funds allocated to the program; prepares recommendations for corrective action with a view to more effective implementation of program activities; promotes to receiving awards for research papers of the various levels made under the program.

Scientific and Technical Council carries out the examination of applications and the results of scientific work, prepares reviews of works and reveals the scientific, technical and organizational problems in the implementation of a project.

The board of trustees organizes activities to attract additional funding for vital functions of the university; University coordinates the interaction with employers, including the adjustment of the admission plan to meet the needs of the region; forms profession-oriented competencies of graduates taking into account the views of employers; attracts to teaching of leading specialists of enterprises and organizations, organizing all kinds of practices and student internships in enterprises; promotes employment of graduates.

Program management and strategic development of scientific and educational directions of the University is complemented by the management of specific projects of the program and projects of the University administrative development, provided by its development strategy for the period up to 2020.

During the period of the Program, the quality management system of education and research of the University is fully subordinated to the interests of the program.

### 3.2. Financial Support of the Project of a National Research University

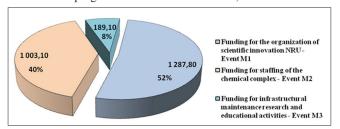
The purpose of the financial and economic strategy of the university is the accumulation of their own financial resources for 5 years (stages "modernization" and "steady growth"), which are sufficient for a sustainable innovative development of self-financing projects to create advanced polymer and composite materials and technologies (the stage "perspective development").

The total investment is 3811,01 ml rubles in the forecast period (2010-2019 years). Among them, the federal budget allocated amount to 1.8 billion rubles, and extra-budgetary resources - 52.8% of the total budget - 2011,01 ml rubles to the National Research University for the Development Program.

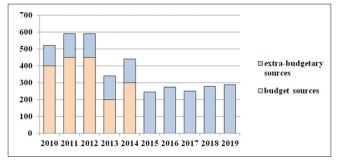
Measures implementation in the 2010-2014 is realized at the expense of:

- 1. Financing of scientific and innovative activities (1,287,800,000. Rub.) is aimed at the acquisition of scientific and technological equipment for commercializable projects in the value of 1.087 billion rubles, as well as funding costs associated with the commercialization of the project in the amount of 200,8 ml rubles from extra-budgetary sources.
- 2. Financing of staffing infrastructure of the chemical complex development in a total volume of 1003,1 billion rubles from the accumulated funds of NRU (591.2 million rubles are budgetary funds, 411.9 million rubles are extra-budgetary resources). Some of funds will be allocated to equip the laboratories by the educational and laboratory equipment of a world level in the amount of 791.3 million rubles.

**Figure 1:** The structure of funds distribution for development of the NRU program's activities in 2010-2014, mln rubles



**Figure 2:** Dynamics of budgetary and extra-budgetary sources of the program financing in 2010-2019, mln rubles



3. Development financing of NRU infrastructure in the amount of 189.1 million rubles, one of them 121.8 million rubles are budgetary funds; 67.3 million rubles are extra-budgetary sources.

Distribution of the total volume of financing of the NRU main activities is shown in Figure 1.

Figures 2 and 3 shows the dynamics of volumes and directions of funds distribution of budget and extra-budgetary sources.

It is expected that the financial sustainability of the University on the third stage of the project (the stage of perspective development of NRU in 2015-2019) will be supported at the end of budget financing by the following programs and results:

Net income is the profit generated from the sale of commercializable projects (472.9 million. rub.) for the period of mixed financing (2010-2014). This profit is sufficient to run the projects and preparation for the commercialization on the stage of perspective development. Accumulated net income of commercializable projects will amount to 1.803,9 billion rubles for 10 years; self-financing of the program from the phase of the university perspective development. Net income from operations of commercializable projects is projected at 1331,01 mln rubles for the period 2015-2019;

PSD activities will lead to the transformation of the structure of the University income with 58% from research and innovative activities currently to 83% in 2019.

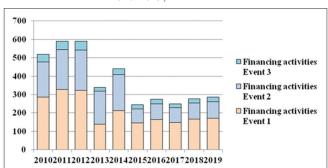
### 3.3. Main Results of Program Development of the National Research University in 2010-2014 Years

### 3.3.1. The most significant scientific achievements of the University

Growth dynamics of publication activity of the University is shown on the graphic №1. It shows that the total number of articles published in journals from the list of Higher Attestation Commission (HAC), has doubled for 5 years, and in 2.3 times in priority areas. The NRU plan in the number of publications in journals HAC consistently was performed over 5 years with a slight excess (5-10%).

The number of articles published in journals WoS/Scopus increased in 1.8 times for 5 years, the number of authors with

**Figure 3:** Directions of financial resources under the program in 2010-2019, mln rubles



the publication of WoS/Scopus increased in 1.6 times. Shared-equity impact factor of articles published in journals WoS/Scopus increased in 1.7 times for the 5 years (shared-equity impact factor is the sum of the product shares of the university authors in the publication in the impact factor journal. The summation is produced of all the articles published in journals indexed in WoS/Scopus. (The shares of the co-authors from other institutions are not taken into account).

The second graph shows the change in the index of Hirsch of the University for 5 years. The left column shows the h-index of the university according to the RISC (as is), and the right column shows the Hirsch index of the KNRTU about publications WoS/Scopus, designed by us based on publications, taking into account part-time workers from other academic institutions RAS. The university Hirsch index for the Russian-speaking articles (RISC) has grown in 1.86 times for 5 years, Hirsch index for articles in English (including part-time workers) has grown in 1.54 times. Note, that a jump in the Hirsch index (in 1.44 times) in 2014 according to RISC is due to the introduction of science index systems in RISC, which allows authors to specify the data on their publications. This has increased the accuracy of the data and, as a rule, increased h-index as the individual authors, and at the university as a whole (Figures 4 and 5).

## 3.3.2. Improvement of the educational process and increase of its efficiency in terms of contribution to the staffing of the economy and the social sphere

The introduction of network forms of education, bachelors training, specialists in engineering for the formation of stable relations of the university with an industry sector will ensure the strategic national paradigm of the "philosophy of partnership," which is based on effective interaction of business, government and educational services.

The increase in the number of students of Master's degree to 6,500 people in spheres of chemical technology and special chemical, industrial and chemical engineering taking into account the needs of employers will enhance business and social reputation of the university in the region with a predominant development of the petrochemical complex and actualization of business activity in the promising areas of business development.

Changes in the structure of the students' contingent, including the increase in the proportion of applied bachelor degrees to 30%, as well as the development of design and education activity led to better educational background of university graduates by forming a special competence in the area of readiness to effective professional activity.

### 3.3.3. The most significant infrastructural changes, including the development of innovative infrastructure

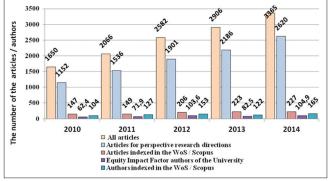
The innovative infrastructure of the university includes all the necessary elements forming mechanism of "innovative elevator" (a system of cooperation in the field of continuous resource support and funding of innovative projects at all stages of the innovative cycle). The most mobile and competitive divisions of the university are presented in Figure 6 and included in the complex of structural

organization units of the university, ensuring the generation of projects, their support and the further transfer of technologies.

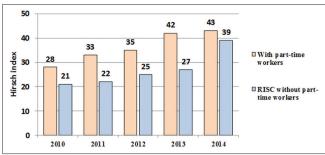
In 2014 the park of pilot plants was formed for developing new chemical technologies approved by the STC of "Tatneftekhiminvest-holding": For disposal of waste acid and sulfur to produce sulfuric acid and fertilizers (15.323000 million roubles.); for the production of petroleum sulfoxides and sulfones with a passing cleaning of diesel from sulphide sulfur (11.940 000 million roubles.); reactor system for oil hydrocracking (6 012 747.23 roub.); for the production of modified oligomeric binders and advanced composite materials on their basis; to produce oxygenated products based on waste of petrochemical production (2,457,650 rubles); debagging installation of thermal vacuum pulsed technologies (3,613,500 rubles).

In 2014, the engineering center signed partnership agreements with the Fund of regional investment projects "AIIR," LLC "Tatneft-Nizhnekamskneftekhim-Oil," LLC "Himoks." It should be noted that the equipment is completed on a modular principle and can be combined in different technological schemes in accordance with the requirements of a specific project. This will allow realizing semi-industrial testing of created new energy efficient technologies, technical solutions and other services for the implementation of workings in the industry. Thus, now, the university has developed engineering infrastructure, in which there are necessary elements of technology transfer: High school - NRU with its scientific research base; SRI - Kazan Research Institute of Polymers and special caoutchouc; Design Institute - "Soyuzhimpromproekt," which is a member of the SRO NP "Project Centre."

Figure 4: The number of the articles, authors, 2010-2014



**Figure 5:** Hirsch index, 2010-2014



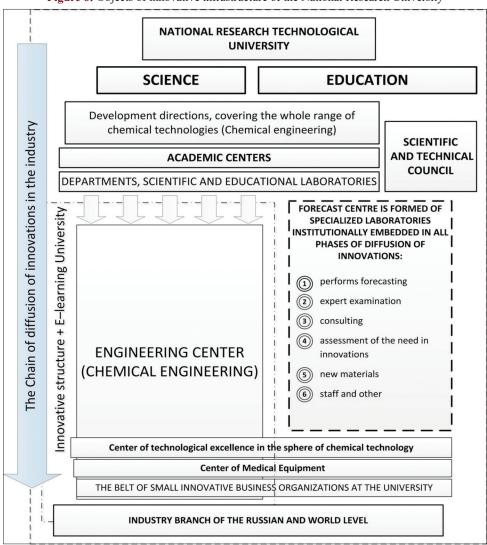


Figure 6: Objects of innovative infrastructure of the National Research University

## 3.3.4. Integration of the University into world scientific and educational space, and measures to improve its positioning on the international level

The University has worked with the agency Quacquarelli Symonds (QS) since 2013, which is the rating originator QS World University Rankings. In 2014, the University ranked among the QS World University Rankings: BRICS, and occupied 43 positions in Russia. In the overall ranking of the BRICS universities "QS World University Rankings: BRICS" university place is 151 from 200 (places are ranked only among the first 100 universities). The University entered the top-100 according to some indicators of BRICS countries. This is the 76<sup>th</sup> place on the BRICS countries (65.2 points out of 100) and 43 for Russia in terms of "proportion of PPP among students," the 90<sup>th</sup> place is the BRICS (35 in Russia) in terms of "proportion of PPP with the degree of doctor."

Membership of the university in the international institutional networks and associations is both necessary assistant with the belt of priority partners, and an effective tool for independent international activities. University is a long-term and effective partner of the International Society for Engineering Education (IGIP). Membership of the university in the Association of technical universities in Russia played an important role in the development of a partnership with IGIP. The university as a leading national research university of Russia in the field of chemical engineering works with the American Institute of Chemical Engineers, which is the largest organization in the United States, brings together leading universities and businesses in the field of chemical engineering.

### 4. DISCUSSIONS

The previous researches, which were made by Rueschemeyer (1976), Lavrukhina (2014), Deem et al. (2008) are devoted to transformation processes in the higher education. Managerial model of higher education institution are revealed in scientific works, made by Makarkin et al. (2004), Prokopenko (2006), Astafieva and Cherchimtseva (2007).

However, the analysis of research papers devoted to the problem of effective management of the universities activities has shown that the issues of analysis and evaluation of the quality of University management are not considered in sufficient detail and are controversial.

### 5. CONCLUSION

The paper deal with the analyzes of the quality of university management in the period of transformation of higher education in Russia. On the base of case study was specified the management model by the National research university reflects the process of integration of education, science and industry on the basis of the University. Revealed the most optimal structure of the university, meet the quality requirements. Specified the key functions of the executive management of program development of the research university, Coordination and control structures of the University. In connection with the change of the legal form of the university the supervisory board has become one of the bodies managing the implementation of the program, which would allow publicprivate partnership in the management of the research universities, optimization of budgeting, attraction of additional sources of financing, the rational use of objects of property rights, including the results of intellectual activities, control of financial flows.

The structural-functional model like this allows the best quality control and University forms transparent for the external and internal environment management system.

Paper results may be useful in practical terms for heads of universities and other institutions of Russia and other countries as an example of best management processes at the university especially in a time of changes and transformation. In theory, the results of this paper may be useful for researchers and students, as well as management training. In view of the results of this case study can identify a number of scientific problems and perspective directions for future researches: The deepening of quality management studies comparing experience of Russian universities and universities in other countries to identify the best options and improve the quality of management processes at the University.

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